

# TT101PVTURBO

HD Video & Power Balun



## ► Features

Single Channel HD Video & Power Transmitter & Receiver (12V/24V DC/AC)

Real-time transmission over UTP cat5e/6  
NTSC, PAL & SECAM video format compatible

Compatible with all TurboHD camera

Color video max up to 230m(754ft) for TurboHD 720P analog camera

Color video max up to 250m(820ft) for TurboHD 1080P analog camera

Male BNC with extended 5.9inch(150mm) mini-coax pigtail

RJ45 Jack for UTP cable

Built-in TVS (Transient Voltage Suppressor) for surge protection

Wave Filter Design, Anti-Static Design

Lightning protection design Grade: III

60 dB crosstalk and noise immunity

Exceptional interference rejection

## ► Overview

The TT101PVTURBO is video & power transmitter and receiver that allows the transmission of real-time CCTV HD video and power signal via cost-effective unshielded Twisted Paired (UTP) cable. Baseband (composite) signals of any type are supported.

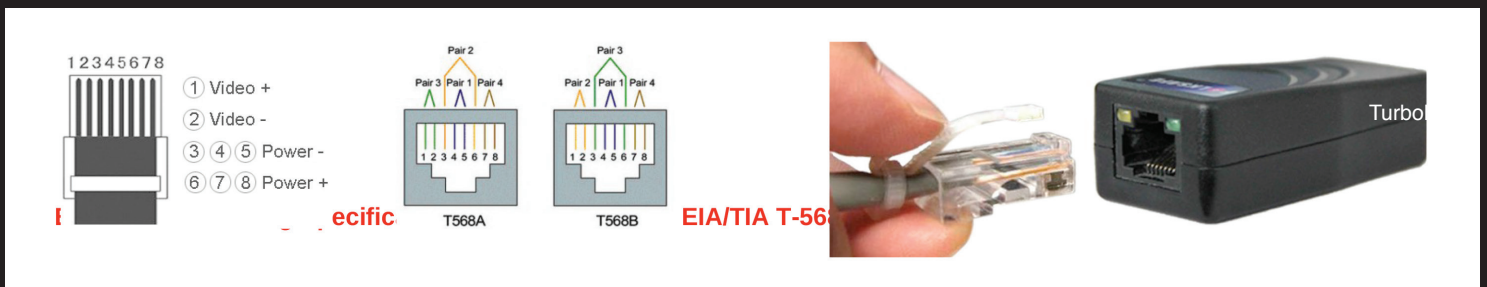
The TT101PVTURBO is compatible with all TurboHD cameras. Used in pairs, FS-HD4301VP eliminates costly and bulky coaxial cable.

The superior interference rejection and low emissions of the TT101PVTURBO allow video & power signals to coexist in the same wire bundle as telephone, datacom, or low-voltage power circuits. This allows the use of a shared or existing cable plant. The TT101PVTURBO is built-in surge suppressor to protect video equipment against damaging voltage spikes. Its crosstalk and noise immunity ensure quality video signals.

## ► Wire and Cable Recommendations

The TT101PVTURBO is recommended to use with Unshielded Twisted Paired (UTP) wiring from 24AWG through 22AWG.. Individually shielded pairs should be avoided, as they reduce the operating range of the systems drastically. Multi-pair cable (25-pair or more) with an overall shield are acceptable. Video

signals can coexist in the same wire bundle as telephone, datacom, or low-voltages power circuits. While video may be routed through telephone punch-down block terminals, any bridge-taps, also called T-taps and any resistive, capacitive or inductive devices MUST BE removed from the pair. For more specific information regarding wire types, gauges and proper installation techniques, please contact us for technical assistance.



Wire	Pin #	Configuration
Orange White	1	Video (+)
Orange	2	Video (-)
Green White	3	Power (-)
Blue	4	Power (-)
Blue White	5	Power (-)
Green	6	Power (+)
Brown White	7	Power (+)
Brown	8	Power (+)

### Note:

1. The transmitter and receiver must use the same wiring.
2. If you adjust saturation of DVR, video transmission distance could be farther.
3. If chromatic aberration occurs within 30 meters, please also adjust saturation, the picture will recover perfectly automatically.
4. The above data is only the result of laboratory test; actual distance will depend on the camera's inrush and operating current, minimum operating voltage, the wire's quality and environmental factors.

## Pwer Distance Chart (over one UTP CAT5e/6, one pair for video, 3 pairs for power)

Model	TT101PVTURBO	
Product Name	Single channel HD video & power transmitter & receiver	
Applied Devices	CCTV cameras, monitors, DVR, switchers, IP encoders and other CCTV equipment	
Video	Video Format	PAL, NTSC, SECAM
	Operating Frequency	DC to 42MHz
	Max Distance	TurboHD 720p : 230m
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	Common-mode / Differential-mode rejection	15KHz to 42MHz 60dB typ
	Impedance	Coax, Male BNC 75Ω unbalanced UTP, RJ45 100Ω balanced
	Attenuation	1.5dB typ Max
Wire Type	Network Wiring	One unshielded twisted pair (for each video signal) 24-16 AWG (0.5 - 1.31mm)
	Category Type	2 or better
	Impedance	100 ± 20 ohms
	DC Loop Resistance	52ohms per 1,000ft (10ohm per 100m)
	Differential Capacitance	19pF/ft max (62pF/max)
Power	Power Input	No external power required
	Power Transmission	12V / 24V, DC, via UTP cat5e/6. Please refer to power distance chart above
Connector	Video Input/Output	Male BNC connector
	Video Input/Output	RJ45 Jack
Protection	Surge Protection	Renewable solid state surge protection
	Video Input	2KV (common mode) 10/700us IEC6100-4-5/1955(GB/T 1726, 5-1999)
	Video Output	2KV (different mode) 10/700us EC6100-4-5/1955(GB/T 1726, 5-1999)
Mechanical	Housing	ABS engineering plastic
	Body Color	Black
	Dimensions (L*W*H)	60.4 * 29 * 20.4mm (BNC connector & cable excluded)
	Net Weight	60g
Environmental	Operating Temperature	-20°C ~ 70°C
	Relative Humidity	0 ~95% (non-condensing)
	Storage Temperature	-40°C ~ 150°C

- Multimedia network teaching system
- Medical monitoring display system
- Industrial automation control system
- Banking, securities, financial information display system
- Remote network server monitoring
- Department store security
- Casino security
- Hospitals, airports and banks
- School campuses

## Application Diagram

